UC San Diego

Spring 2011 - UC San Diego Health Journal of Nursing: The Unique Power of Nursing

Title

Homeostasis Comes to the Bedside - Acute Hemodialysis Nursing

Permalink

https://escholarship.org/uc/item/656675kn

Journal

UC San Diego Health Journal of Nursing, 4(1)

Author

Ashton, Debbie, BSN, RN

Publication Date

2011-04-01

Peer reviewed

eScholarship.org Powered by the California Digital Library
University of California

Homeostasis Comes to the Bedside

ACUTE HEMODIALYSIS NURSING

By Debbie Ashton BSM, RN, CNN

We come to your unit, your patient, with machines: some the size of a large VCR, some the size of a small tractor (and almost as noisy). We re-arrange the furniture and hog the sink. We invade your world for several hours, and if all goes as planned, we leave you with a patient who is closer (sometimes only by a tiny bit) to metabolic and cardio/pulmonary/vascular stability than when we arrived.

We are the Acute Hemodialysis Staff.

Our staff includes 14 career and 7 per diem Registered Nurses. We are a 'seasoned' staff. The minimum years of Nephrology Nursing experience in our staff is 5 years, the maximum – 40 (!). Eight of our nurses are certified in Nephrology Nursing. Our services include all forms of dialytic therapies: Intermittant Hemodialysis, Continuous Renal Replacement Therapies, Peritoneal Dialysis, and Plasmapheresis (not a dialytic therapy). We can travel to just about any patient care area in the house, including OR and ER. Further, we are a mobile group, providing dialytic therapies at Hillcrest, Thornton, Central Jail (yep), and of course, Sulpizio! Our assignments can change from minute to minute depending on patient acuity.

The hemodialysis nurse serves in a variety of roles. Well beyond being merely a treatment provider, they teach patients and staff at the bedside about the therapy, access care, medications and diet considerations.

The work of a Nephrology Nurse includes some unique features. Autonomy and accountability are paramount, as we work independently without nephrology peer support on-hand. As we are on-call 24/7, there are times we are the only hemodialysis nurse available. Critical thinking/problem-solving skills are our mainstays. And, you would be surprised to know how much we understand about water pressure and plumbing!!

We are highly specialized, experts in 'all things kidney'. Unlike the bedside RN's, our jobs are generally less physically taxing. Finally, we have the privilege of spending long periods of uninterrupted time with the patient and family. This time is sometimes used as an opportunity to teach the family and patient. We often get to know details about the patient's lives that other team members don't just because we are in the room for prolonged times, available to lend an ear.

Which brings me to my next point….

Nephrology Nurses, particularly those who provide Acute Hemodialysis treatments, run the risk of being misjudged by their peers.

Does it appear that the Acute Hemodialysis Nurses do an inordinate amount of sitting at the patient's bedside? You may be tempted to think we have too much time on our hands, but consider this analogy.

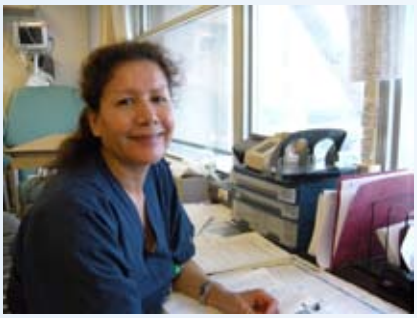
A Hemodialysis Nurse at work has been compared with a swimming duck….effortless on the surface, but paddling like h*** under the water!

As with all nurses, the vast majority of the work we do is in our BRAINS.

Hemodialysis Nurses endeavor to ANTICIPATE and PREVENT complications associated with dialysis therapies. Our patients can move from stable to shock in seconds. We are constantly monitoring the patient's response to the treatment plan; consulting/collaborating with the

Debbie Ashton, BSN, RN, CNN, has been a Registered Nurse for 34 years. She has 31 years in Nephrology Nursing, working in Chronic & Acute Hemodialysis and Home Dialysis training with adult and pediatric patients and 3 years in Intensive Care. Debbie has done extensive teaching at the local and national levels. Beginning with an ADN at El Camino College in Torrance, CA, she finished her BSN at CSU Dominguez Hills. Now working in the Acute Hemodialysis unit, Debbie's passion is to render excellent evidence-based nursing care.

Several of our nurses serve on committees.



Mona Jaime RN, New Graduate-Magnet Champion

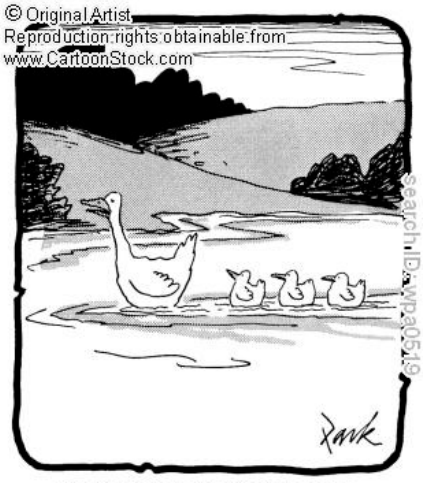
Noel Oabel RN, EPIC and Research Committees

Debbie Ashton RN, Research Committee

bedside RN, Nephrologists, and Primary Team as necessary to adjust the plan to achieve optimal patient outcomes.

Our manager, Eileen Lischer BSN, MA, RN CNN, is a great mentor and leader. She sets the performance bar high and ensures we have the education and support necessary to meet the expectations. If you have attended the International CRRT conference here in San Diego in the last few years, you might have heard her speak. She also was awarded the Nurse Manager of the Year last spring.

Our unit participates in many research projects and studies. Several include the use of different types of membranes (i.e. dialyzers) to treat non-renal diseases. For example, there are two studies looking at dialytic-type membranes and their use in sepsis, and one for multiple myeloma. We are right there at the forefront of innovation, just where we oughtta be!



"The trick is to make it look as easy as possible while, underneath, you're paddling like hell."

Combine all the following:

Accountability
Autonomy
Applying Critical Thinking Skills
Flexibility
Experienced/Expert Staff
Mentorship
Leadership
Ongoing Educational Program
Variety of therapies performed
Participation in ongoing research
and this is what you get . . .

UCSD is a great place to practice Acute Hemodialysis Nursing!

were submerged into baths in hope that the affected skin would slough off. Conversely today, early, aggressive surgical intervention is the treatment of choice. As mentioned, patients are scheduled repeatedly for surgical excision procedures and multiple applications of allograft cadaver skin or porcine until the site is considered clean enough and prepared for autografting.

Bleeding is always a grave concern for all burn patients. Blood and fluid loss must be managed accurately in order to maintain the patient's temperature and hemodynamic stability. As noted by Trudy while little was done in the past to counteract these complications, there are several avenues of treatment available to us today. Tumescence is one option, involving the injection of fluid combined with a small dose of vasoconstrictor at either the burn site or the split thickness skin graft site. This provides a synergistic affect that reduces bleeding by physical and chemical means. In combination with, or as an alternative to this therapy, the use of topical Thrombin, a powerful coagulant, may be used. This medication is applied as a fine mist spray directly to the bleeding area, and then covered with a moistened Telfa dressing. The Telfa dressing prevents disruption of the clot that is intended to form, in order to control the bleeding. For larger areas requiring debridement, lap pads soaked in a saline/vasoconstrictor solution work to slow down the bleeding in preparation for the Telfa Treatment.

Anesthesia plays a critical role in assessing the patient blood volume replacement needs. The best practice is now considered to be to replace lost volume with actual blood constituents in lieu of the formerly common crystalloid, Albumin and Hetastarch treatments. Tumescence, combined with replacement therapy poses the risk of placing a patient into fluid overload leading to possible renal complications, hence the required monitoring of the patient's electrolytes, acid base balance, oxygen saturation levels and core temperatures. In spite of the fact that the O.R. temperature is raised to 80 degrees, the patients are

always at great risk for hypothermia. To diminish this complication we supplement body warmth, utilizing measures such as Baer huggers, a warm air blanket, and the traditional fluid warming blankets, in addition to keeping the patient covered and limiting exposure whenever possible.

Dressing care has become an art form. There are multiple choices available to surgeons depending on the severity of the burn and their personal preferences. The majority of them contain antibiotic properties. Some of the relatively common treatments include Sulfamylon soaked dressings, Xeroform with Polysporin Ointment, and Acticoat.

Treating these patients is not only physically, but emotionally challenging. We will be seeing these patients enter the OR for months, never making contact or getting to know them. Then the day arrives and the patient is no longer sedated or intubated. Their eyes are open and they track us. The beginning of our psycho-social relationship begins. Sometimes we have the opportunity to meet their family. Trudy makes a point not to ask them what happened. Her belief is that the family has already gone over the burn incident several times, explaining to loved ones, friends, and the doctors and wondering what other steps or measures should have been taken to prevent this tragic accident. Trudy tries to offer a calm reassuring environment providing the patient and family with a nurse who makes them feel comfortable and safe, knowing their loved one will be cared for. Trudy enjoys offering "distraction" games for the children that will include all members of the surgical team, and family while they are waiting to be transported into the operating room. The diversion offers a simple moment of escape. Trudy and team manage to find ways to involve the family with the care of their loved ones and comfort them in their stressful time of need. Our operating room nurses deal with their own emotions as well as they contemplate some of the circumstances that bring our patients to us: small children who have been intentionally (as a form of punishment) or inadvertently scalded, patients with burned limbs resulting from falls into a fire ring, and innocent victims suffering at the expense of freak accidents or fires. Every scenario has a story behind it, and we care for each of our patients regardless of their circumstances. We function as teachers and resource specialists for them and their families as we encourage, listen, and offer support during this critical part of their experience.

On occasion a patient, discharge to rehabilitation and home, returns to visit Trudy and the nursing staff. Trudy vividly remembers the little two-year old, burned from her feet to waist, stopping by one day. Trudy was fearful the child would never be able to walk after her burn injury. Much to her delight she saw the little girl go from a "cocoon" to a bright butterfly of a little girl, dancing and running around the hallways. She demonstrated no fear as she offered hugs and kisses to Trudy and her OR nursing staff. A surge of happiness and faith in humanity spurs the team with the emotional support to carry on, to realize they do make a difference in life. And offer the promise of hope for the future.

As the clinical expert in the OR, Trudy pulls from her vast wealth of experience to mentor others in the latest and best practice in burn care, as well as the preferred techniques of our physicians. She has attended specialty seminars and shares that information with the staff. She works in tandem with the nurses on the Burn Unit to ensure continuity of care. Trudy, in conjunction with the other nursing members of our surgical team, exemplifies the qualities we embrace as an organization to care for our patients.

Acute Dialysis Nursing Team!